

## **DETAILED ACTION**

### **Status of Claims**

Claims 21-22 and 24-29 have been previously examined. Claims 21-22 have been amended. No claims have been added or cancelled. Thus, claims 21-22 and 24-29 are presented for examination.

### ***Response to Arguments***

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 21-22 and 24-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Applicant's claim amendment recites the limitation, "automatically selecting by the reservation distribution server of a re-accommodation option among the data of the flight schedule database for the passengers on flights not affected by the future schedule records (FSR); and among the future schedule records for the other passengers... validating by an operator of the re-accommodation options which do not satisfy the re-accommodation automation rules" The plain meaning

of the limitation is unclear. For Examination purposes, the Examiner is interpreting automatically selecting by a reservation distribution server a re-accommodation option as meeting the limitations of the claim.

4. Claim 1 recites the limitation "the passengers on flights not affected by the future schedule records" in line 24. There is insufficient antecedent basis for this limitation in the claim.

5. Claim 1 recites the limitation "the other passengers" in line 26. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 1 recites the limitation, "the re-accommodation options which do not satisfy the re-accommodation automation rules" in line 30. There is insufficient antecedent basis for this limitation in the claim.

7. Portions of claim 1 are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. Appropriate Correction is required.

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 21-22, 25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barlow U.S. Patent No. 5,652,867 in view Slivka U.S. Pre-Grant Publication No. 2003/0225600 A1 in further view of Yu U.S. Patent No. 6,408,276 B1.

10. As per Claim 21, Barlow teaches receiving at least one batch of flight schedule changes at a Schedule Loader server (SLS) (see Col. 2 lines 28-34 and Col. 3 lines 1-10);

extracting the changes contained in the batch and storing said changes as a set of Future Schedule Records (FSR) which are stored as temporary data available for passenger re- accommodation purpose (see col. 2 lines 28-34 and Col. 3 lines 51-54); publishing the future schedule records (FSR) on a reservation distribution server (see Col. 3 lines 51-54); Barlow does not explicitly teach the limitation taught by Slivka simulating passenger re-accommodation options to determine the best re-accommodation option for each passenger among said future schedule records (FSR) and the data of the flight schedule database (see para. 27 and 44);

applying the changes in the flight schedule database by: detecting dependent re-accommodation options by checking whether some of the best re- accommodation options are comprised in said future schedule records (FSR) (see para. 52) ; and updating the flight schedule database starting with the future schedule records (FSR) comprising dependent re-accommodation options (see para. 36 and 45); and

updating the reservation inventory database according to the re-accommodations options determined during the simulation step (see para. 45).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of invention to modify the method of Barlow to include the teachings of Slivka to accommodate a disrupted passenger. Barlow does not explicitly teach the limitation taught by Yu

accessing the future schedule records (FSR) and the flight schedule database simultaneously by the reservation distribution server (see Col. 9 lines 20-60); said simulating step comprising the steps of: deleting the future schedule records (FSR), automatically selecting by the reservation distribution server of a re-accommodation option among the data of the flight schedule database for the passengers on flights not affected by the future schedule records (FSR); and among the future schedule records for the other passengers (see Col. 10 lines 30-37), verifying of the re-accommodation options by the reservation distribution system by applying re-accommodation automation rules(see Col. 9 lines 34-55), and validating by an operator of the re-accommodation options which do not satisfy the re-accommodation automation rules (see Col. 9 lines 20-60)

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of invention to modify the methods of Barlow and Slivka to include the teachings of Yu to provide feasible re-accommodation options.

11. As per Claim 22, Barlow in view of Slivka teach the method of claim 21 as described above. Barlow further teaches a accessing via a Graphical User Interface for set up of the re-accommodation automation rules (see Fig. 6), for the verification step (see Col. 5 lines 30-39) and for the validation step (see Col. 5 lines 48-58). It would have been *prima facie* obvious to one of ordinary skill in the art at the time of invention to modify the method of Barlow to further include the teachings of Slivka to accommodate a disrupted passenger.

12. As per Claim 28, Barlow in view of Slivka teaches the method of claim 21 as described above. Barlow does not explicitly teach the limitation taught by Slivka wherein in a case of cyclical dependence between several records, upon the execution of the re-accommodation operations in the reservation system, each reservation in question is modified only once by the assembly of these reassessments (see para. 46). It would have been *prima facie* obvious to one of ordinary skill in the art at the time of invention to modify the method of Barlow to include the teachings of Slivka to efficiently process a re-accommodation request.

13. Claims 24-26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barlow U.S. Patent No. 5,652,867 in view Slivka U.S. Pre-Grant Publication No. 2003/0225600 A1 in further view Yu U.S. Patent No. 6,408,276 B1 and Official Notice.

14. As per Claim 24, Barlow in view of Slivka teaches the method of claim 21 as described above. Barlow does not explicitly teach a characteristic suffix (SL) is assigned to the changes and stored as future schedule records (FSR). Official Notice is taken that assigning a suffix to delineate data is old and well known. It would have been *prima*

facie obvious to one of ordinary skill in the art at the time of invention to modify the method of Barlow and Slivka to include the teachings of Official Notice to delineate various data elements from one another.

15. As per Claim 25, Barlow in view of Slivka teaches the method of claim 24 as described above. Barlow further teaches wherein an argument is assigned to each record (FSR), said argument indicates whether this record (FSR) has been made accessible to the reservation distribution server (see Col. 2 lines 16-24, Examiner is interpreting the CRS being able to make evaluations as an indication that a record has been made accessible).

16. As per Claim 26, Barlow in view of Slivka teaches the method of claim 25 as described above. Barlow further teaches determining for each extracted change a corresponding flight periods of the flight schedule database (see Col. 2 lines 55-60); and upon further determination that said corresponding flight periods have not already been affected by one change whose argument is positive (see Col. 5 lines 45-65); perform the further steps of:

sending a scheduling change message (see Col. 4 lines 25-32); indicating that the change is a record accessible to the reservation distribution server, by placing its argument (FSR is published) in the positive state (see Col. 4 lines 40-45, Examiner is interpreting the CRS executing options as having accessed a change record). Barlow does not explicitly teach said period is duplicated and the suffix (SL) is assigned to the duplicated period. Official Notice is taken that duplicating a period and assigning an identifier to note the change is old and well known. It would have been *prima facie*

obvious to one of ordinary skill in the art at the time of invention to modify the method of Barlow to include the teachings of Official Notice to denote a change. The limitation, "to integrate the change in the duplicated period that it affects" is merely a statement of intended result and as such is afforded little patentable weight.

17. As per Claim 29, Barlow in view of Slivka teaches the method of claim 21 as described above. Barlow does not explicitly teach the records (FSR) are deleted after final updating of the flight schedule and the reservation inventory databases. Official Notice is taken that deleting data after it has been applied is old and well known. It would have been *prima facie* obvious to one of ordinary skill in the art at the time of invention to modify the methods of Barlow and Slivka to further include the teachings of Official Notice to free up storage space.

18. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barlow U.S. Patent No. 5,652,867 in view Slivka U.S. Pre-Grant Publication No. 2003/0225600 A1 in further view of Yu U.S. Patent No. 6,408,276 B1 and Shetty et al. U.S. Pre-Grant Publication No. 2003/0191678 A1.

19. As per Claim 27, Barlow in view of Slivka teaches the method of claim 21 as described above. Barlow does not explicitly teach the limitation taught by Shetty wherein upon simulation of re-accommodation, a degree of dependency is attributed to each record as a function of the number of other records in cascade for which an application of said record gives rise to a re-accommodation of the reservations on said other records (see para. 5-6). It would have been *prima facie* obvious to one of ordinary

skill in the art at the time of invention to modify the methods of Barlow and Slivka to include the teachings of Shetty to determine a least cost solution schedule.

***Conclusion***

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TONYA JOSEPH whose telephone number is (571)270-1361. The examiner can normally be reached on Mon-Fri, 7:30 am-5:00pm First Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571 272 0847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JOHN W HAYES/  
Supervisory Patent Examiner, Art Unit 3628